PATENT

DRAWING AMENDMENTS

Please cancel Drawing Sheets 3 and 4 containing Figs. 3-4 and Figs. 5-6, respectively, and substitute therefor Replacement Drawing Sheets 3 and 4 containing Figs. 3-4 and Figs. 5-6, respectively. By this amendment, Fig. 4 is amended to add reference character 43 and to relocate the reference line for reference character 53, and Fig. 5 is amended to cancel reference character 42 and substitute therefor reference character 48.

PATENT

REMARKS

The Office Action mailed September 10, 2007, has been received and reviewed. By the present Response, Claims 4-6 and 12-13 are canceled, Claims 1-2, 7-11, and 14-17 are amended, and new Claims 29-33 are added. Currently pending in the application, then, are Claims 1-3, 7-11, and 14-33, of which Claims 1, 11, and 18 are independent and of which Claims 18-28 are withdrawn. No new matter has been introduced by this Response. The Applicant respectfully traverses the rejections and requests reconsideration.

Election/Restrictions

The Applicant thanks the Examiner for his consideration in withdrawing the election of species requirement between the embodiments of Figs. 1 and 2. The Applicant has amended Claims 1 and 11 to more broadly recite that the cushion pad is "received by" the receiving portion. Thus, Claims 1 and 11 cover embodiments in which the cushion pad is disposed "on" or "within" the receiving portion, among other arrangements, as expressly disclosed in the specification in the last sentence of paragraph [0017]. New Claims 31-33 further define details of the mounting of the cushion pad to the brush head.

Drawings

The drawings are objected to because, in Fig. 5, it appears that reference numeral 42 designating the second surface of the cushion pad 24 is misdirected. Enclosed is Replacement Drawing Sheet 4 including Fig. 5, in which reference character 42 has been changed to reference character 48. Accordingly, this objection is overcome.

In addition, the drawings are objected to for allegedly failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: apertures 43 as recited on p. 4, line 22. Enclosed is Replacement Drawing Sheet 3 including Fig. 4, which includes reference character 43 designating the apertures

PATENT

in the cushion pad 24. Accordingly, this objection is overcome. In addition, the reference line for reference character 52 in Fig. 4 has been relocated to properly point to the attached end 52 of the bristles 28.

Specification

The disclosure is believed to be objected to for an obvious typographical error in the description of Fig. 7 in the Brief Description of the Drawings section. The Applicant notes that there is one line 7-7 in Fig. 3, but only one such line, and the specification refers to "lines." So the plural form "lines" has been amended to the singular form "line," and the Applicant believes that this is a complete response to the Examiner's objection. Accordingly this objection is overcome.

Claim Objections

Claims 2, 9-11, 16, and 17 are objected to because of various informalities. Correction of these informalities has been made, as detailed below. The Applicant notes that none of the amendments made to overcome these objections has narrowed the scope of the corresponding claims, so no prosecution history estoppel is believed to have been created.

Claim 2 is objected to because of the following informality: in lines 2 and 3 (both occurrences), it appears that "is disposed" should read –being disposed—. Claim 2 is amended at both places to cancel the "is disposed to" wording and substitute the wording "that extends from." Accordingly, this objection is overcome.

Claim 2 is objected to because of the following informality: in line 2, "the second portion" lacks antecedent basis. Correction has been made. Accordingly, this objection is overcome.

Claims 9 and 10 are objected to because of the following informality: in line 2, the term "apertures" should be replaced with—bristle anchors—for clarity. Independent Claim

Application Serial No.: 10/807,940

Attorney Docket No.: 5N11.1-081

PATENT

1 recites the bristle anchors having apertures, and Claims 9 and 10 are referring to these apertures. For clarity, the term "apertures" has been amended to read the "bristle anchor apertures." Accordingly, this objection is overcome.

Claim 11 is objected to because of the following informality: in lines 4-5, the recitation ", and the plurality of apertures" does not make sense. This recitation has been canceled from the claim. Accordingly, this objection is overcome.

Claims 16 and 17 are objected to because of the following informality: in line 2, the term "apertures" should be replaced with —bores—for clarity. Correction has been made. Accordingly, this objection is overcome.

Claim Rejections

Claims 1, 4-6, and 8-10 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by France (FR 2466216). Claims 1-4, 6, 8-13, and 15-17 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Snell (US 1,957,363). Claim 7 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over France. And Claims 7 and 14 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Snell. Claims 4-6 and 12-13 are canceled. The Applicant respectfully traverses the rejections of the remaining claims.

The France reference discloses a brush having a cushion membrane 2 including wells 5 that hold bristles 3. The cushion membrane 2 and the wells 5 are made of "an injectable plastic such as polyethylene" (English translation, p. 3, lines 21-23). As such, the France reference discloses the cushion membrane 2 and the wells 5 being made of the same material.

The Snell reference discloses a brush having a sheet 11 with openings and having ferrules 12 that are tufted with bristles 10 and inserted into the openings. The ferrules 12 are "sprung or forced into" the openings in the rubber sheet 11 (col. 2, lines 66-71). The

PATENT

ferrules 12 each have a conical head 15, and flange 14, and a groove 16 therebetween, with the conical head for penetrating through the openings and the groove for mechanically securing the ferrule to the sheet (col. 2, lines 60-66). As such, the Snell reference discloses the ferrules 12 having mechanical interlock features and being forced into a mechanically interlocked connection with the sheet 11.

On the other hand. Claims 1 and 11 are amended to recite that the bristle anchors and the cushion pad are integrally molded together. In addition, Claims 1 and 11 are amended to recite that the bristle anchors and the cushion pad are made of two different materials. Claims 7-8 and 14-15, for example, recite the bristle anchors and the cushion pad being made of a propylene material and a thermoplastic elastomeric material, respectively. These dissimilar materials are selected for producing a strong covalent bond between the bristle anchors and the cushion pad, instead of just a mechanical interlock. The result is that, when the bristle anchors and the cushion pad are integrally molded together, the bristle anchors cannot be pulled out of the cushion pad, at least not without tearing the cushion pad and rendering it unusable. This is an improvement over conventional two-piece bristle anchor and cushion pad arrangements, which have mechanical interlocks that are not as strong. And this is an improvement over conventional one-piece tufted cushion pad arrangements, which are made of only one material that either works best for tufting or for cushioning but is not ideal for either. For these reasons, Claims 1 and 7-8, and Claims 11 and 14-15, are believed to now be in condition for allowance. Claims 2-3 and 7-10, and Claims 16-17, depend from Claims 1 and 11, respectively, so they are also believed to be in condition for allowance.

New Claims

New Claims 29-33 all depend from Claim 1, which is believed to be in condition for allowance for the reasons set forth above. So these new claims are also believed to be in condition for allowance.

New Claim 29 recites the bristle anchors being pre-formed and the cushion pad being molded around the pre-formed bristle anchors so that the bristle anchors are embedded securely in the cushion pad. This feature is disclosed in the specification at para. [0020]. On the other hand, the France reference discloses the cushion membrane 2 and the wells 5 being one piece. And the Snell reference discloses the sheet 11 and the ferrules 12 as separate pieces that are assembled together with mechanical interlocking features. As such, these references do not disclose the claimed recitation of the cushion pad being molded around the pre-formed bristle anchors. For this additional reason, Claim 29 is believed to be in condition for allowance.

As mentioned above, new Claims 31-33 are added to further define details of the mounting of the cushion pad. New Claim 31 is dependent from Claim 1 and recites the receiving portion defining a front recess, with the cushion pad disposed in the recess and being exposed through the recess. This embodiment is shown in Fig. 1 and described in paragraph [0018]. Further details of examples of this type of brush construction are disclosed in the France and Snell references.

New Claim 32 is dependent from Claim 1 and recites the cushion pad being disposed within the receiving portion and the bristles extending through apertures in the front face of the brush. In this embodiment, the receiving portion defines a rear cavity, the cushion pad is fitted into the rear cavity, and the rear cavity is covered by a rear cover plate. This embodiment is shown in Fig. 2 and described in paragraph [0018]. Although the front face and the front face apertures are not expressly described in the specification, they are clearly shown in Fig. 2. And although the rear cavity is not expressly shown in Fig. 2, it is described in paragraph [0018] of the specification and reference character 36 (for the cavity) points to the rear of the brush head in Fig. 2. In addition, a person of ordinary skill in the art would understand that, because the bristle anchors are not visible in FIG. 2 (as they are in Fig. 1), the cushion pad is not exposed and instead is disposed within the brush and is covered by the front face of the brush. In fact, the Examiner's initial restriction

Application Serial No.: 10/807,940

Attorney Docket No.: 5N11.1-081

PATENT

requirement pointed out that in the embodiment of Fig. 1 the cushion pad is disposed "on" the receiving portion and that in the embodiment of Fig. 2 the cushion pad is disposed "in" the receiving portion. So the cushion pad being disposed within the brush head is disclosed, or at least inherent, in the application as filed. Further details of an example of this type of brush construction are disclosed in Patent Application Pub. No. US2005/0055788.

New Claim 33 is dependent from Claim 32 and further recites the front face apertures being aligned with the bristle anchor apertures with the bristles extending from the bristle anchors and through the front face apertures and beyond. Although the alignment of the front face apertures and the bristle anchor apertures is not expressly disclosed by the application, Fig. 4 and 7 show the bristles being generally perpendicularly oriented relative to the cushion pad and Fig. 2 shows the bristles being generally perpendicularly oriented relative to the front face of the brush head, so a person of ordinary skill in the art would understand that the front face apertures and the bristle anchor apertures are aligned are disclosed, or at least inherent in, the application as field. As such, no new matter is added by these new claims.

The brush of Claims 32 and 33, with the cushion pad disposed within the receiving portion, the bristle anchor apertures aligned with the front face apertures, and the bristles extending from the bristle anchor apertures through the front face apertures, in combination with the bristle anchors and cushion pad being integrally molded of dissimilar materials to promote a covalent bond therebetween (as recited in amended Claim 1), is not disclosed by the cited references. For this additional reason, new Claims 32 and 33 are believed to be in condition for allowance.

New Claim 30 includes all of the elements of Claims 32 and 33, and is dependent from base Claim 1 and intervening Claim 29. For all of the reasons set forth above, this claim is believed to be in condition for allowance.

PATENT

CONCLUSION

In view of the amendments submitted herein and the above comments, it is believed

that all grounds of rejection are overcome and that the application has now been placed in

full condition for allowance. Accordingly, the Applicant respectfully requests early and

favorable action. Should there be any further questions or reservations, the Examiner is

urged to telephone the Applicant's undersigned attorney at (770) 984-2300.

Respectfully submitted, GARDNER GROFF

GREENWALD & VILLANUEVA, P.C.

/John W. Greenwald/

John W. Greenwald, Reg. No. 41,803

Customer Number 23506

GARDNER GROFF

GREENWALD & VILLANUEVA, P.C.

Tel: 770/984-2300 Fax: 770/984-0098

16